

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An armature of a rotary electric machine, the rotary electric machine ~~comprising~~comprising:

an armature on which a plurality of coils are formed by ~~making winding~~a winding wire ~~wound in the slots with~~between two slots, having a predetermined number of slots ~~theretw~~out~~theretw~~between, of a plurality of slots provided side by side in a circumferential direction of the armature to conduct an electric current to adjoining commutator segments~~segments~~segments; and

a yoke provided with magnetic poles,

wherein the number of slots are half the number of commutator segments, and the coils are formed as a plurality of pairs of coils, each pair of coils that respectively conduct an electric current to commutator segments adjoining at both sides in the circumferential direction with reference to an arbitrary commutator segment,

the pair of coils facing opposite poles positioned different from each other, and one coil of the pair of coils being wound in a normal winding state, and the other ~~coil~~coil of the pair of coils, in a reverse winding state.

2. (Currently Amended) The armature of a rotary electric machine according to claim 1, wherein the rotary electric machine is formed with N magnetic poles, n ~~pieces~~of slots, and 2n ~~pieces~~of commutator segments, a pair of coils that respectively conduct an electric current to three commutator segments adjoining at both sides in the circumferential direction with reference to an arbitrary commutator segment have an angle of approximately $(360/N)$, and one~~one~~ coil thereof is wound as a normal winding coil, and the other~~other~~ coil, as a reverse winding coil.

3. (Currently Amended) The armature of a rotary electric machine according to claim 1, the rotary electric machine comprising N magnetic poles, n pieces of slots, and ~~n~~ pieces of commutator segments, wherein a number $(2n/N)$ obtained by dividing the number of commutator segments by the number of magnetic poles is a natural number, and $((2n/N)-1)$ coils formed in a manner respectively conducting an electric current to $(2n/N)$ pieces of arbitrary commutator segments adjoining in the circumferential direction have an angle of approximately $\{(1+2m)\times(360/N)\}$ where m is a natural number including 0 and are wound so that a normal winding alternates with a reverse winding.

4. (Currently Amended) The armature of a rotary electric machine according to claim 1, 2, or 3, wherein the coils are wound with one slot therebetween.

5. (Currently Amended) An armature of a rotary electric machine, the rotary electric machine ~~comprising~~ comprising:

an armature on which a plurality of coils are formed by ~~making winding~~ a winding wire ~~wound in the slots~~ with a predetermined number of slots therebetween out of a plurality of ~~slots~~ ~~slots~~, provided side by side in a circumferential ~~direction~~ ~~direction~~, conduct an electric current to adjoining commutator ~~segments~~ ~~segments~~; and

a yoke provided with magnetic poles,
wherein the number of ~~slots~~ ~~are~~ ~~slots~~ is half the number of commutator segments, and

the coils are formed as pairs of coils, each pair of coils ~~that~~ respectively ~~conduct~~ ~~conducts~~ an electric current to commutator segments adjoining at both sides in the circumferential direction with reference to an arbitrary commutator segment, the pair of coils facing the same poles positioned different from each other, and the respective coils being wound in the same winding direction.

6. (Currently Amended) The armature of a rotary electric machine according to claim 5, wherein the rotary electric machine is formed with N magnetic poles, n pieces of slots, and $2n$ pieces of commutator segments, a pair of coils that respectively conduct conducts an electric current to three commutator segments adjoining at both sides in the circumferential direction with reference to an arbitrary commutator segment have an angle of approximately $(360 \times 2/N)$, and respective coils are wound in the same winding direction.

7. (Currently Amended) The armature of a rotary electric machine according to ~~claim 5 or 6, claim 5~~, wherein the coils are wound with one slot therebetween.

8. (Currently Amended) The armature of a rotary electric machine according to ~~any of claims 1 through 7, claim 1~~, wherein the armature comprises two layers of coils wound in the radial direction, and with reference to an arbitrary slot, a pair of first coils in the radial direction to be wound with the arbitrary slot therebetween and a pair of second coils in the radial direction to be wound with a slot adjoining the arbitrary slot therebetween are wound at a winding amount based on a preset ratio.

9. (Currently Amended) The armature of a rotary electric machine according to claim 8, wherein in the first coils and second coils, each pair of coils are wound with a positional displacement from each other in the radial direction.

10. (Currently Amended) The method for producing an armature of a rotary electric machine according to ~~any of claims 1 through 9, claim 1~~, wherein adjoining slots are formed so that a groove width of one slot is narrower at an inner diameter side and wider at an outer diameter side and a groove width of the other slot is wider at an inner diameter side and narrower at an outer diameter side.

11. (Currently Amended) A method for producing an armature of a rotary electric machine having a yoke provided with magnetic poles, the rotary electric machine comprising:

~~an armature on which forming a plurality of coils are formed on an armature by making winding a winding wire wound in the slots with a predetermined number of slots therebetween out of a plurality of slots-slots, provided side by side in a circumferential direction direction to conduct an electric current to adjoining commutator segments-segments; and~~

~~a yoke provided with magnetic poles,~~
~~wherein the number of slots are half the number of commutator segments, and~~
~~providing a number of slots which are half a number of commutator segments;~~
~~and~~

~~forming the coils are formed as a plurality of pairs, each pair of coils that respectively conduct conducting an electric current to commutator segments adjoining at both sides in the circumferential direction with reference to an arbitrary commutator segment, - the each pair of coils disposed so as to face opposite poles positioned different from each other, and one coil being wound so as to be in a normal winding state, with the other coil wound in a reverse winding state.~~

12. (Currently Amended) The method for producing an armature of a rotary electric machine according to claim 11, wherein the rotary electric machine is formed with N magnetic poles, n pieces of slots, and 2n pieces of commutator segments, a pair of coils that respectively conduct conducts an electric current to three commutator segments adjoining at both sides in the circumferential direction with reference to an arbitrary commutator segment have an angle of approximately $(360/N)$, and one coil thereof is wound as a normal winding coil, and the other,other coil, as a reverse winding coil.

13. (Currently Amended) The method for producing an armature of a rotary electric machine according to claim 11, the rotary electric machine comprising N magnetic poles, n pieces of slots, and 2n pieces of commutator segments, wherein a number $(2n/N)$

obtained by dividing the number of commutator segments by the number of magnetic poles is a natural number, and $((2n/N)-1)$ coils formed in a manner respectively conducting an electric current to $(2n/N)$ pieces of arbitrary commutator segments adjoining in the circumferential direction have an angle of approximately $\{(1+2m) \times (360/N)\}$ where m is a natural number including 0 and are wound so that a normal winding alternates with a reverse winding.

14. (Currently Amended) The method for producing an armature of a rotary electric machine according to claim 11, ~~12, or 13,~~ wherein the coils are wound with one slot therebetween.

15. (Currently Amended) A method for producing an armature of a rotary electric machine having a yoke provided with magnetic poles, the rotary electric machine comprising:

an armature on which forming a plurality of coils on the armature are formed by making winding a winding wire wound in the slots with a predetermined number of slots therebetween out of a plurality of slots provided side by side in a circumferential direction conduct an electric current to adjoining commutator segments segments, and

a yoke provided with magnetic poles,

wherein the number of slots are slots is half the number of commutator segments, and

the coils are formed as a plurality of pairs, each pair of coils that respectively conduct conducts an electric current to commutator segments adjoining at both sides in the circumferential direction with reference to an arbitrary commutator segment,

the pair of coils disposed so as to face the same poles positioned different from each other, and each coil being wound in the same winding direction.

16. (Currently Amended) The method for producing an armature of a rotary electric machine according to claim 15, wherein the rotary electric machine is formed with N

magnetic poles, n pieces of slots, and $2n$ pieces of commutator segments, a pair of coils that respectively conduct conducts an electric current to three commutator segments adjoining at both sides in the circumferential direction with reference to an arbitrary commutator segment has an angle of approximately $(360/N)$, and respective coils are wound in the same winding direction.

17. (Currently Amended) The method for producing an armature of a rotary electric machine according to claim ~~15 or 16~~, 15, wherein the coils are wound with one slot therebetween.

18. (Currently Amended) The method for producing an armature of a rotary electric machine according to ~~any of claims 11 through 17~~, claim 11, wherein the armature comprises two layers of coils wound in a radial direction, and with reference to an arbitrary slot, a pair of first coils in the radial direction to be wound with the arbitrary slot therebetween and a pair of second coils in the radial direction that are wound around the arbitrary slot and adjoining the first coils in the circumferential direction are wound at a winding amount based on a preset ratio.

19. (Original) The method for producing an armature of a rotary electric machine according to claim 18, wherein in the first coils and second coils, each pair of coils are wound with a positional displacement from each other in the radial direction.

20. (Currently Amended) The method for producing an armature of a rotary electric machine according to ~~any of claims 11 through 19~~, claim 11, wherein adjoining slots are formed so that a groove width of one slot is narrower at an inner diameter side and wider at an outer diameter side and a groove width of the other slot is wider at an inner diameter side and narrower at an outer diameter side.

21. (New) The armature of a rotary electric machine according to claim 5, wherein the armature comprises two layers of coils wound in the radial direction, and with

reference to an arbitrary slot, a pair of first coils in the radial direction to be wound with the arbitrary slot therebetween and a pair of second coils in the radial direction to be wound with a slot adjoining the arbitrary slot therebetween are wound at a winding amount based on a preset ratio.

22. (New) The armature of a rotary electric machine according to claim 5, wherein adjoining slots are formed so that a groove width of one slot is narrower at an inner diameter side and wider at an outer diameter side and a groove width of the other slot is wider at an inner diameter side and narrower at an outer diameter side.

23. (New) The method for producing an armature of a rotary electric machine according to claim 15, wherein the armature comprises two layers of coils wound in a radial direction, and with reference to an arbitrary slot, a pair of first coils in the radial direction to be wound with the arbitrary slot therebetween and a pair of second coils in the radial direction that are wound around the arbitrary slot and adjoining the first coils in the circumferential direction are wound at a winding amount based on a preset ratio.

24. (New) The method for producing an armature of a rotary electric machine according to claim 15, wherein adjoining slots are formed so that a groove width of one slot is narrower at an inner diameter side and wider at an outer diameter side and a groove width of the other slot is wider at an inner diameter side and narrower at an outer diameter side.